GENERAL CONTROL NOTES

1. CONTROL DIAGRAMS ARE SCHEMATIC IN NATURE AND DO NOT SHOW ALL REQUIRED CONTROL DEVICES AND COMPONENTS.
2. ALL WIRING, CONTROL COMPONENTS, DEVICES AND PROGRAMMING SHOWN ON THESE CONTROL DRAWINGS SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE.
3. ALL ACTUATORS SHALL BE OF THE ELECTRICAL TYPE FOR THIS PROJECT (NO PNEUMATIC ACTUATORS ALLOWED).
4. ALL CONTROL COMPONENTS SUCH AS RELAYS, SWITCHES, ETC. SHALL BE MOUNTED IN STEEL ENCLOSURES WITH STEEL MOUNTING BACKPLATES.
5. MECHANICAL CONTRACTOR SHALL PROVIDE ALL WIRING, CONDUIT, TRANSFORMERS, FUSING AND ALL OTHER ELECTRICAL COMPONENTS REQUIRED FOR COMPLETE INSTALLATION.
6. ALL CONTROL WIRING SHALL BE INSTALLED IN CONDUIT.

FAN SCHEDULE

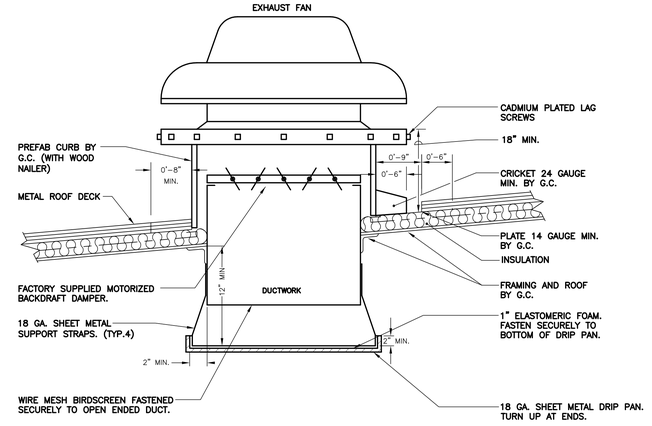
MARK	LOCATION	AREA AND/OR BLDG SERVED	SYSTEM AND/OR SERVICE	AIR FLOW		TSP		FAN				MOTOR ELECTRICAL							CONTROL SEQUENCE	REMARKS
								TYPE	ARRANGEMENT, ROTATION, AND DISCHARGE	DRIVE	FAN MAX RPM	NOMINAL POWER			PHASE	VOLT	RPM	SPEED CONTROL		
				CFM	[L/s]	IN	[Pa]					BHP	HP	[kW]						
3003-EF-1	VHCL BLDG	ROUTING MAINT	3003-IH-1	350	[170]	0.5	[130]	CENTRIFUGAL	DOWNBLAST	DIRECT	1,199	0.06	0.25	[ ]	1	120	1725	SOLID STATE		EXPLOSION PROOF
3003-EF-2	VHCL BLDG	ROUTING MAINT	3003-IH-2	1600	[760]	0.5	[130]	CENTRIFUGAL	DOWNBLAST	DIRECT	1530	0.33	0.75	[1]	1	120	1725	SOLID STATE		
3003-EF-3	VHCL BLDG	ROUTING MAINT	3003-IH-3	2900	[1400]	0.5	[130]	CENTRIFUGAL	DOWNBLAST	DIRECT	1725	1.05	1.50	[1]	3	208	1725	SOLID STATE		

NOTE

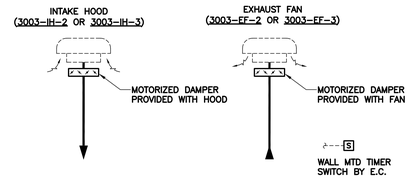
ALL SELECTIONS ARE BASED ON AN ALTITUDE OF 1500 FT.

INTAKE/EXHAUST HOOD SCHEDULE

MARK	LOCATION	SYSTEM AND/OR SERVICE	TYPE	APPLICATION	THROAT SIZE		AIR FLOW		APD		DAMPER TYPE	REMARKS
					IN	[mm]	CFM	[L/s]	IN	[Pa]		
3003-IH-1	STORAGE	3003-EF-1	SPUN ALUMINUM	OUTSIDE AIR INTAKE	8"ø	[200]	350	[170]	0.15	[38]	ELECTRIC	EXPLOSION PROOF
3003-IH-2	STORAGE	3003-EF-2	SPUN ALUMINUM	OUTSIDE AIR INTAKE	18"ø	[450]	1600	[760]	0.15	[38]	ELECTRIC	
3003-IH-3	STORAGE	3003-EF-2	SPUN ALUMINUM	OUTSIDE AIR INTAKE	30"ø	[750]	2900	[1400]	0.08	[20]	ELECTRIC	



1 ROOF MOUNTED FAN/HOOD DETAIL
NTS



2 EXHAUST FAN/INTAKE HOOD CONTROL DIAGRAM
NTS

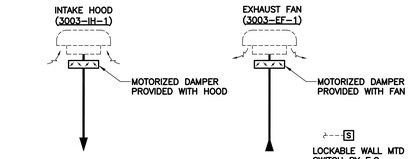
SEQUENCE OF OPERATION

GENERAL:

THE EXHAUST FAN, AND MOTOR OPERATED DAMPERS SHALL BE OPERATED BY A WALL MOUNTED TIMER SWITCH.

OPERATION:

EXHAUST FAN MOTOR SHALL ENERGIZE AND DAMPERS LOCATED AT INTAKE HOOD AND FAN INLET SHALL FULLY OPEN WHEN TIMER SWITCH IS TURNED ON. FAN MOTOR SHALL DE-ENERGIZE AND DAMPERS LOCATED AT INTAKE LOUVER AND FAN INLET SHALL FULLY CLOSE WHEN TIMER STOPS



3 EXHAUST FAN/INTAKE HOOD CONTROL DIAGRAM GROUNDS MAINTENANCE STORAGE ROOM
NTS

SEQUENCE OF OPERATION

GENERAL:

THE EXHAUST FAN, AND MOTOR OPERATED DAMPERS SHALL BE OPERATED BY A LOCKABLE WALL MOUNTED SWITCH. ROOM SHALL BE FULLY EXHAUSTED 24/7.

OPERATION:

- EXHAUST FAN MOTOR SHALL ENERGIZE AND DAMPERS LOCATED AT INTAKE HOOD AND FAN INLET SHALL FULLY OPEN WHEN SWITCH IS TURNED ON. FAN MOTOR SHALL DE-ENERGIZE AND DAMPERS LOCATED AT INTAKE LOUVER AND FAN INLET SHALL FULLY CLOSE WHEN SWITCH IS TURNED OFF.
- THE SWITCH SHALL BE OF THE LOCKABLE TYPE, SO EXHAUST FAN CANNOT BE TURNED OFF ON ACCIDENT.

BID DOCUMENTS 7/1/2011

Revisions	Date

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I hearby certify that this Plan, Specification, or Report was prepared by me, or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Oregon.

Signature:
Name: Warren L. Lloyd
Discipline: Mechanical
Oregon Registration No. 78701PE Expiration date: 12.31.12
Date Issued: **-**-**

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NATIONAL CEMETERY ADMINISTRATION

Drawing Title: VEHICLE STORAGE BLDG HVAC SCHEDULE	Project Title: REPLACE ADMINISTRATION AND MAINTENANCE BUILDING AND SITE IMPROVEMENTS		Date: 7-1-2011
Approved: Director, Office of Construction Management	Building Number: 3003	Checked: DavBod / Drawn: JamTho	Project No.: 906CM3009
Approved: Director, Project Management Service	Location: EAGLE POINT NATIONAL CEMETERY, 2769 RILEY ROAD, EAGLE POINT, OR 97524		DRAWING NO.: H-3003-4.1 Dwg. 169 OF 181